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| 09/579,309 | 05/25/2000 | Russell W. Bell | 60705-1240 | 7169 |

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| EXAMINER |
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NGUYEN, PHUOC H

| ART UNIT | PAPER NUMBER |
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2143

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/579,309

Applicant(s)

BELL, RUSSELL W.

Examiner

Phuoc H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This office action is in response to the amendment filed on November 17, 2003.
2. Office action number 6 consists of claims 1-33. Applicant amended claim 28.
3. Pending claims 1-33 are presented for further examination.

Response to Arguments

4. Applicants' arguments have been fully considered but they are not persuasive.
5. Regarding to claim 1, applicants argued that Locklear's reference does not teach or suggest *a first communication device electrically coupled to the first computer configured to provide communications over a LAN, the first communication device in communication with a WAN via a first communication link.*

Locklear's invention disclose a communication system includes an access server that communicated information between a wide area network (WAN) and a local area network (LAN). The access server 16 (first computer/master computer) includes a WAN interface, a switch fabric, a number of route processors, and a LAN interface (examiner treated the WAN interface, the switch fabric, the route processors, and the LAN interface as a communication device). Refer to figures 1, and 2, the access server (16) has the LAN interface which is couple to the LANs 40 servicing devices 14, and the access server 16 has the WAN interface to couple to the data network 18 (WAN embodiment) through a communication link 52.

6. Regarding to claims 13, and 28, applicants argued that Locklear's reference does not teach or suggest *using a master computer to assign a least one virtual connection to each computer in communication with the LAN.*

Locklear's reference disclose during a session handled by access server 16 (master computer) device 14 may communicate information to device 12 through the switch fabric which will assign an address (e.g. virtual path, virtual channel) to servicing devices (col. 5, lines 1-45).

7. Claims 2-12,14-27, and 29-33, is rejected at least by virtual of their dependency on independent and by other reasons set forth in the previous office action [see Paper No. 6]

8. According, rejections for claims 1-33 are presented as below.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7,13-19,24-26, and 28-33 rejected under 35 U.S.C. 102(e) as being anticipated by Locklear, Jr. et al. U.S. Patent 6,252,878.

Referring to claims 1,13, and 28, Locklear reference disclose a first computer (Figure 1, server 16); a first communication device (NIC) electrically coupled to the first computer configured to provide communications over a LAN (connection between server 16 and LAN 40 of the figure 1), the first communication device in communication with a WAN (connection between server 16 and data network 18 of the figure 1) via a first communication link (link 52 of the figure 1)(Figures 1, and 2; col.3, lines 7-21; and col. 3, lines 37-45; col.. 3, lines 54-65); a

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second computer (Figure 1; devices 14, and 12); and a second communication device electrically coupled to the second computer configured to provide communications over the LAN between the second and the first computers (Figure 1, communication between server 16 and devices 14), wherein the first computer is configured to assign at least one virtual connection for each of the first and second computers to enable the first computer to route WAN data traffic across the LAN (Figure 2; col. 4, lines 43-67; col. 5, 1st paragraph; and col. 6, lines 50-67). For further explain of Locklear's invention. Locklear's reference disclose a communication system includes an access server that communicated information between a wide area network (WAN) and a local area network (LAN). The access server 16 (first computer/master computer) includes a WAN interface, a switch fabric, a number of route processors, and a LAN interface (examiner treated the WAN interface, the switch fabric, the route processors, and the LAN interface as a communication device). Refer to figures 1, and 2, the access server (16) has the LAN interface which is couple to the LANs 40 servicing devices 14, and the access server 16 has the WAN interface to couple to the data network 18 (WAN embodiment) through a communication link 52. Locklear's reference further disclose during a session handled by access server 16 (master computer) device 14 may communicate information to device 12 through the switch fabric which will assign an address (e.g. virtual path, virtual channel) to servicing devices.

3. Referring to claims 2, and 14, Locklear reference disclose the first communication link comprises a xDSL communication link (col. 2, last paragraph through col. 3, 1st paragraph).

4. Referring to claims 3,15, and 29, Locklear reference disclose local area network (LAN) data signals are transmitted via frequencies greater than 1 MHz (col. 3, 2nd paragraph).

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5. Referring to claims 4, and 16, Locklear reference disclose the first computer manages simultaneous data transfers between both itself and the second computer over the first communication link (Abstract; col. 4, lines 43-67; and col. 5, lines 47-53).
6. Referring to claims 5,17, and 31, Locklear reference disclose the at least one virtual connection is identified and managed via an asynchronous transfer mode (ATM) protocol (col. 3, lines 6-35).
7. Referring to claims 6, and 18, Locklear reference disclose local area network (LAN) data signals are transmitted via frequencies less than 1 MHz and wherein the frequencies fall between identified xDSL frequencies (col. 2, last paragraph through col. 3, 1st paragraph).
8. Referring to claims 7,19, and 30, Locklear reference disclose each of the first and second computers are configured with a first and second communication device respectively, each of the first and second communication devices configured to enable local area network (LAN) communications between the first and second computers and wherein each of the first and second communication devices in cooperation with their respective computer is configured to assign at least one virtual connection for each of the first and second computers to enable either of the first and second computers to route wide area network (WAN) data traffic across the LAN (Figures 1, and 2; col. 1, lines 11-16; col. 4, lines 22-33; and col. 5, lines 37-58).
9. Referring to claims 24-26, Locklear reference disclose a transfers are completed via a wireless network link, the wide area network (WAN) is the Internet, and the wide area network (WAN) is a private network (Figure 1).
10. Referring to claim 32, Locklear reference disclose the asynchronous transfer mode (ATM) protocol uses an assigned virtual connection to accomplish data transfers to local area

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network (LAN) connected devices (Figures 1, and 2; col. 1, lines 11-16; col. 3, lines 6-35, col. 4, lines 22-33; and col. 5, lines 37-58).

11. Referring to claim 33, Locklear reference disclose the asynchronous transfer mode (ATM) protocol uses the combination of a terminal control protocol (TCP) and an Internet protocol (IP) address to identify a destination device on the wide area network (WAN) (Figures 1, and 2; col. 1, lines 11-16; col. 3, lines 6-35, col. 4, lines 22-33; and col. 5, lines 37-58).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 8-10,20-22, and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Locklear in view of Olarig et al. U.S. Patent 6,370,656.

14. Referring to claims 8-10,20-22, and 27, Locklear reference disclose a first computer configured to provide communications over a LAN; however, Locklear reference fail to disclose a master computer and a slave computer are selected from the first and second computers using one or more initialization algorithms, the slave computer is configured to reconfigure the local area network (LAN) upon detecting a master computer failure, and master computer applies a set of rules derived from a group of parameters consisting of access, traffic rates, and time-of-day when assigning the at least one virtual connection to each of the master.

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Olarig reference disclose master computer and a slave computer are selected from the first and second computers using one or more initialization algorithms, the slave computer is configured to reconfigure the local area network (LAN) upon detecting a master computer failure, and master computer applies a set of rules derived from a group of parameters consisting of access, traffic rates, and time-of-day when assigning the at least one virtual connection to each of the master (server 16) and the slave computers (Figures 7, and 8; col. 20, lines 41 through col. 21, lines 29).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was made to incorporate Olarig's teaching into Locklear's method to have the slave computer is configured to reconfigure the LAN upon detecting a master computer failure, as a result it provides a fault tolerant systems are designed to operate essentially without interruption.

15. Claims 11,12, and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Locklear.

Referring to claims 11,12, and 23, Locklear reference disclose the first communication link such as LAN and xDSL; however, Locklear fail to disclose the first communication link is a community antenna television (CATV) network link, a wireless network link.

It would have been obvious to one of the ordinary skill in the art at the time of the invention was made to use either the CATV or wireless network link depending on the choice of implementation, and still achieve the same end results.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pickett et al. U.S. Patent 6,356,554

Picket U.S. Patent 6,154,465

Anne et al. U.S. Patent 6,282,660

Aho U.S. Patent 6,185,215

Hirviniemi U.S. Patent 5,802,285

Ohba et al. U.S. Patent 5,588,003

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H. Nguyen whose telephone number is 703-305-5315.

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The examiner can normally be reached on Mon -Thu (7AM-4:30PM) and off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 703-308-5221. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Phuoc H. Nguyen
Examiner
Art Unit 2143

December 31, 2003



DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100